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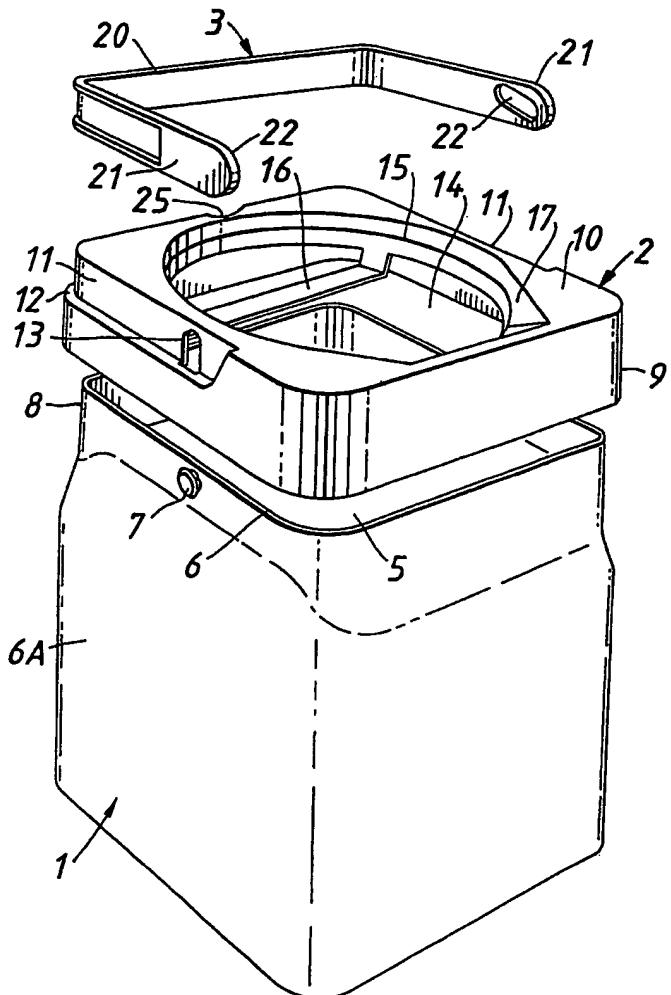
(56) Documents cited
GB 2244972 A GB 1478183 A WO 90/11229 A
US 4976369 A US 3638823 A

(58) Field of search
UK CL (Edition K) B8D
INT CL⁵ B65D

(54) Container assembly

(57) A container assembly suitable for paint has a base pot 1 to which is sealed a collar 2 so that spigots 7 project through apertures 13 in the collar and are presented in a rebate 11 in the collar. The handle 3 is attached by cam slots 22 to the spigots 7. The handle 3 is complementary to the rebate 11 so that it can be closely and unobtrusively accommodated in the rebate when not in use. The cam slots 22 are slidable on the spigots 7 so that the handle can be displaced on the spigots to provide clearance for pivoting to a carrying position. The assembly may be formed of plastics moulded components with the collar 2 including a brush wipe bar 16.

FIG. 2.

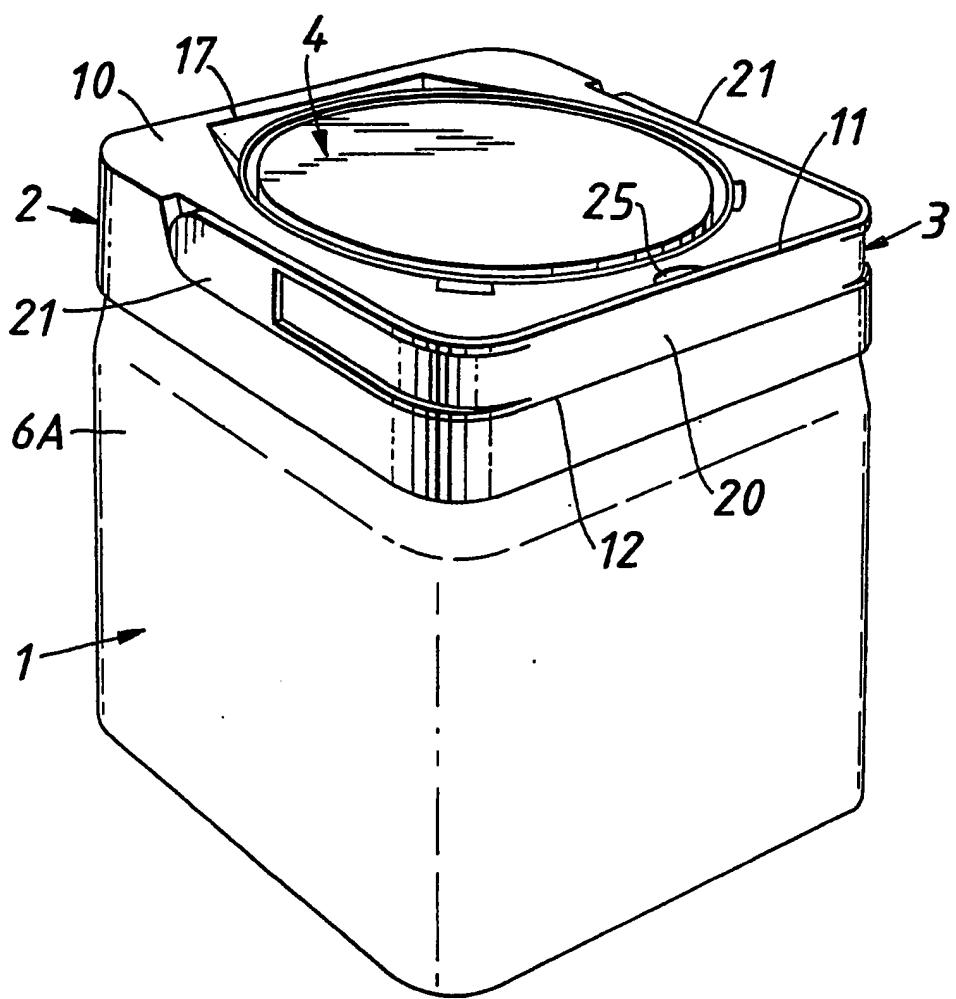


At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

GB 2 262 929 A

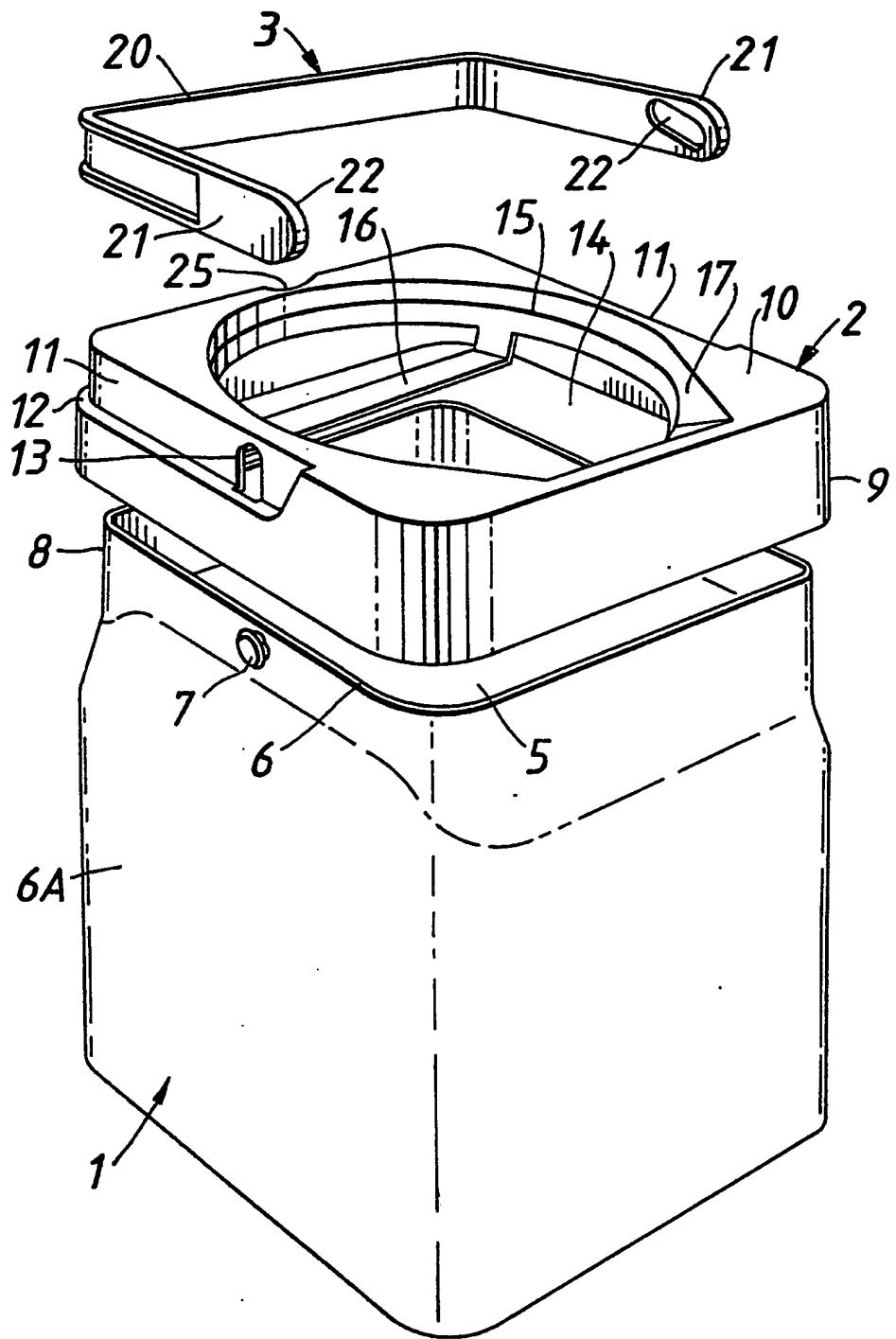
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FIG. 1.



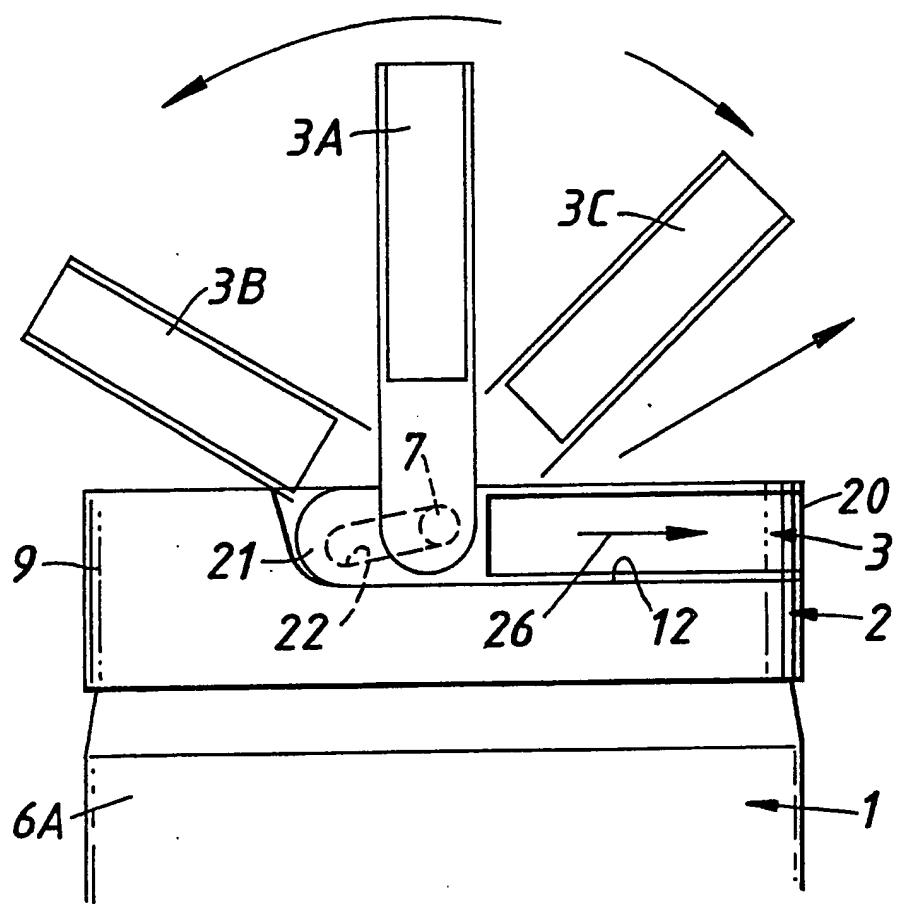
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FIG. 2.



3/3

FIG. 3.



TITLE

"A container assembly"

TECHNICAL FIELD & BACKGROUND ART

The present invention relates to a container assembly
5 of the type having an open topped container on a side wall
of which is pivotally mounted a carrying handle so that the
handle can be adjusted between a carrying position in which
it overlies and straddles the open top and a storage
10 position in which the handle lies adjacent to the container
clear of the open top. Assemblies of the kind mentioned
are typically used for containing paint or similar liquid,
for example as disclosed in International Publication WO
90/11229. It is an object of the present invention to
provide a container assembly of the kind discussed having
15 an improved handle structure whereby in its storage
position the handle is unobtrusively disposed on the
container.

STATEMENT OF INVENTION & ADVANTAGES

According to the present invention there is provided
20 a container assembly comprising an open topped container
having a side wall and a carrying handle ends of which are
pivotally mounted at opposed positions on the side wall for
the handle to be adjustable between a carrying position in
which it overlies and straddles the open top and a storage
25 position in which it is closely and unobtrusively
accommodated in a substantially complementary rebate in the
side wall, and wherein the pivotal mountings for the handle
ends comprise spigots slidably co-operating with cam tracks
which are so arranged that the handle can be displaced from
30 its storage position outwardly of the side wall and in a
plane substantially parallel with said rebate to provide
clearance between the handle and container for hand access
and said displacement causes relative movement between the

spigots and cam tracks which displaces the handle ends from their close accommodation in the rebate to provide clearance between the handle ends and the rebate for the handle to be pivotted into its carrying position.

5 By providing the co-operating spigots and cam tracks in the attachment of the handle ends to the container the handle can be displaced at its storage position and in the plane of the rebate, in one sense outwardly of the container to provide clearance for hand access to adjust the handle into its carrying position and in the opposite sense to displace the handle inwardly of the container so that it is closely accommodated in a substantially complementary storage recess. Also as the handle is displaced outwardly of the container from its close accommodation in the storage recess, the relative sliding movement between the spigots and cam tracks can lift the handle ends from the rebate to provide clearance for pivoting or conversely, when the handle is displaced inwardly of the container, the movement between the spigots and cam tracks can cause the handle to move into close engagement with the storage rebate to be unobtrusively accommodated in the rebate to a closer extent than that which would be realised by simple pivotal mountings for the handle ends on the container. Such unobtrusive positioning of the handle in its storage position is most desirable in the storage of, for example, paint containers, to alleviate the possibility of the handle being inadvertently snagged and permitting several containers to be stacked one on another or in close side-by-side relationship for efficient use of storage space.

30 Preferably the cam tracks are provided in the handle ends to co-operate with spigots extending from the container.

Usually the handle in its storage position will be accommodated in the rebate in a plane substantially parallel with the plane of the open top of the container. In this latter arrangement the cam tracks may be 5 rectilinear and inclined relative to the plane of the open top.

Preferably the container comprises an open topped pot and a collar attached to and sealingly engaged with the open top of the pot, the collar forming the open top of the container and including in its periphery the rebate for 10 accommodating the handle in its storage position. Typically the components of the container assembly of the present invention will be formed as plastics mouldings and conveniently the collar is bonded or welded to the open top 15 of the pot. With the collar forming the rebate for accommodating the handle it is preferred that the handle ends are pivotally mounted on spigots which extend from the pot (possibly being integrally moulded therewith) and project through apertures or slots in the collar to engage 20 with cam tracks in the handle ends.

The container assembly may include a lid for closing and sealing the open top. The aforementioned collar may provide a seating which extends around the periphery of the open top of the container and the lid can snap engage and 25 seal with the seating.

Where the container assembly is intended for paint or other liquid which is likely to be applied by a brush, the aforementioned collar can include a bar-like component which is conveniently integrally moulded with the collar to 30 bridge the open top for providing a brush wipe. Preferably the bar-like component is situated within the container to underlie a lid when the latter is fitted.

DRAWINGS

One embodiment of a paint container assembly constructed in accordance with the present invention will now be described, by way of example only, with reference to the accompanying illustrative drawings in which:-

5 Figure 1 is a perspective view of the assembly in which the handle is shown in its storage position and a lid is fitted to close the open top;

10 Figure 2 is an exploded view of the assembly (with the lid omitted) to show its component parts, and

15 Figure 3 diagrammatically illustrates the operation of the handle.

DETAILED DESCRIPTION OF DRAWINGS

20 All of the component parts in the container assembly illustrated are formed as plastics mouldings and these consist of a base pot 1, a collar 2, a carrying handle 3 and a lid 4. The container assembly is shown having a generally rectangular profile which is convenient for storage of several containers in side-by-side relationship with minimal wastage of storage space but it will be realised that the invention can be applied to container assemblies with different profiles such as cylindrical.

25 The base pot 1 provides for the paint storage and has an open top 5 formed by a rim 6 on an upstanding wall 6A.

30 Located adjacent to the rim 6 and moulded integrally with the upstanding wall of pot 1 are a pair of spigots 7 which project outwardly of the wall 6A and are located directly opposite each other one on each side of the open top 5.

The upper region of the wall of the pot 1 adjacent to its open top is formed with a neck 8 which receives the collar 2.

35 The collar 2 has a skirt 9 within which is received the neck 8 as a close fit. The skirt 9 extends downwardly from a flat top face 10 of the collar. Formed between the collar face 10 and its skirt 9 is a rebate 11

which extends part way around the external periphery of the collar 2 to present an upwardly directed shoulder 12 which is substantially parallel with the plane of the face 10.

Extending through the wall of the collar 2 in the rebate 11 are a pair of opposed apertures 13. The apertures 13 are located to co-incide, one each with the spigots 7, so that when the neck 8 of the base pot is received within the skirt 9 of the collar 2, the spigots 7 extend one through each aperture 13 to be presented in the rebate 11 spaced from the shoulder 12. The collar 2 defines a circular top opening 14 for the container assembly. The opening 14 has a peripheral seating 15 for snap engagement by the lid 4 to close and seal the container. Moulded integral with the collar 2 is a bar 16 which bridges the top opening 14 and is disposed below the lid 4 when the latter is fitted to the assembly. The bar 16 provides a conveniently located brush wipe. Formed in the top face 10 of the collar adjacent to the opening 14 and diametrically opposite the rebate 11 is a tapered face 17 to facilitate pouring of paint from the container when required.

The collar 2 is firmly secured to the rim 6 of the base pot 1 by welding in a manner which provides a peripheral fluid seal between the collar and the pot.

The handle 3 has a bridging portion 20 from which extend a pair of substantially parallel legs 21. Formed within the free ends of the legs 21 are cam tracks in the form of rectilinear slots 22. The slots 22 directly oppose each other in the handle ends and are inclined relative to the general plane of the handle 3. The handle 3 is shaped and dimensioned to be substantially complementary to the rebate 11 in the collar 2. The handle is attached as part of the assembly by the spigots 7 which project through the apertures 13 and which snap

engage one each in the cam slots 22 so that the handle can pivot on the spigots 7 whilst straddling the collar 2. The spigots 7 engage with their respective cam slots 22 to be slidable along those slots.

5 The handle 3 in Figures 1 and 3 is shown in a storage position in which it is closely and unobtrusively accommodated in the complementary rebate 11 so that a lower edge presented by the handle sits on the shoulder 12 of the rebate 11 and an upper edge presented by the handle lies in the plane of the top face 10.

10 The handle 3 is adjustable from its storage position to a carrying position indicated at 3A in Figure 3 by initially sliding the handle outwardly of the collar 2 in the plane of the rebate 11 with the lower edge of the handle sliding along the shoulder 12. A small recess 25 may be provided between the collar and the handle part 20 to provide a convenient access for leverage to displace the handle outwardly in the direction of arrow 26 in Figure 3.

15 During displacement of the handle in the direction of arrow 26 from its storage position, it will be seen from Figure 3 that the cam slots 22 slide over the spigots 7 with which they respectively engage. During this latter sliding movement and because of the inclination of the cam slots with respect to the plane of the handle 3, the ends of the handle adjacent to the cam slots will be lifted from the shoulder 12 of the rebate 11. Consequently when the handle 3 is withdrawn from the rebate 11 in the direction of arrow 26 to the extent permitted by the cam slot 22, the bridging part 20 of the handle will be spaced from the collar 2 sufficiently for hand access to hold the handle and pivot it towards the carrying position 3A. Furthermore adequate clearance is provided between the pivotted ends of the handle and the shoulder 12 to permit

the handle to be rotated on its spigots to the carrying position 3A or alternative positions 3B and 3C as shown in Figure 3 (so that the handle is not impeded by abutment with the shoulder 12 of the rebate which would otherwise be the case if the handle is attempted to be pivotted when in its unobtrusive stored position). The handle can be returned to its stored position simply by lowering it to abut the shoulder 12 and displacing it into the rebate 11 so that it becomes fully seated on the shoulder 12.

CLAIMS

1. A container assembly comprising an open topped container having a side wall and a carrying handle ends of which are pivotally mounted at opposed positions on the side wall for the handle to be adjustable between a carrying position in which it overlies and straddles the open top and a storage position in which it is closely and unobtrusively accommodated in a substantially complementary rebate in the side wall, and wherein the pivotal mountings for the handle ends comprise spigots slidably co-operating with cam tracks which are so arranged that the handle can be displaced from its storage position outwardly of the side wall and in a plane substantially parallel with said rebate to provide clearance between the handle and container for hand access and said displacement causes relative movement between the spigots and cam tracks which displaces the handle ends from their close accommodation in the rebate to provide clearance between the handle ends and the rebate for the handle to be pivotted into its carrying position.

2. An assembly as claimed in claim 1 in which the cam tracks are located in the handle ends and these cam tracks co-operate with spigots which extend from the container.

3. An assembly as claimed in either claim 1 or claim 2 in which the handle in its storage position is accommodated in the rebate in a plane substantially parallel with the plane of the open top.

4. An assembly as claimed in claim 3 in which said cam tracks are rectilinear and inclined relative to the plane of the open top when the handle is in its storage position.

5. An assembly as claimed in any one of the preceding claims in which the container comprises an open topped pot and a collar attached to and sealingly engaged with the

open top of the pot, the collar forming the open top of the container and including the rebate for accommodating the handle in its storage position.

5. An assembly as claimed in claim 5 in which the handle ends are pivotally mounted on spigots extending from the pot and said spigots project through openings in the collar to engage with the handle ends.

10. An assembly as claimed in either claim 5 or claim 6 in which the collar provides a seating which extends around the periphery of the open top of the container and a lid sealingly engages said seating to close the open top.

15. An assembly as claimed in any one of claims 5 to 7 in which the collar includes a bar-like component which bridges the open top to provide a brush wipe.

10. An assembly as claimed in claim 8 when appendant to claim 7 in which the bar-like component underlies the lid.

11. An assembly as claimed in any one of the preceding claims having its components formed as plastics mouldings.

20. An assembly as claimed in claim 10 when appendant to claim 5 in which the collar is welded to the pot.

12. A container assembly substantially as herein described with reference to the accompanying illustrative drawings.

Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

Application number

9127488.6

Relevant Technical fields

(i) UK CI (Edition K) B8D

(ii) Int CI (Edition 5) B65D

Search Examiner

A BURROWS

Databases (see over)

(i) UK Patent Office

(ii)

Date of Search

31 MARCH 1992

Documents considered relevant following a search in respect of claims 1-12

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
Y	GB 2244972 A (LIN PAC) Lines 4-16 page 9	1
Y	GB 1478183 A (BOWLER) Figure 1	1, 2, 6
Y	WO 90/11229 A2 (REED) Whole document acknowledged on page 1	1, 5, 7-10
Y	US 4976369 A (LION) Figure 3	1, 2, 6
X:Y	US 3638823 A (CHARTE MANUFACTURING CO) Whole document	X 1, 3, 4 Y 2, 10



Category	Identity of document and relevant passages	Relevant to claim(s)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family, corresponding document.

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